possible values of cycle time based at least in part on said re-allocated I/O resources exists to balance said I/O capacity with said buffer memory space; or

refusing to admit said new viewer or existing viewer returning from said cached state of said storage system to said I/O state of said storage system if a possible value or range of possible values of cycle time based at least in part on said re-allocated I/O resources is determined not to exist to balance said I/O capacity with said buffer memory space;

61. The method of claim 60, wherein if a possible value or range of possible values of cycle time based at least in part on said re-allocated I/O resources exists to balance said I/O capacity with said buffer memory space, then performing one of the following steps prior to admitting said new viewer or existing viewer returning from said cached state of said storage system to said I/O state of said storage system:

leaving the existing value of cycle time and the existing value of read-ahead size unchanged if the existing value of cycle time is equal to said determined possible value of cycle time to balance said I/O capacity with said buffer memory space, or if the existing value of cycle time is within said determined range of possible values of cycle time to balance said I/O capacity with said buffer memory space; or

if the existing value of cycle time is not equal to said possible value of cycle time determined to balance said I/O capacity with said buffer memory space or is not within said range of possible values determined to balance said I/O capacity with said buffer memory space, then determining a new value of cycle time for said storage system that is equal to said determined possible value of cycle time to balance said I/O capacity with said buffer memory space, or that is within said determined range of possible values of cycle time to balance said I/O capacity with said buffer memory space; and determining a new value of read-ahead size for said storage system based at least in part on said new value of cycle time for said storage system.

62. The method of claim 57, wherein prior to refusing to admit said existing viewer returning from said cached state of said storage system to said I/O state of said storage system, said method further comprises:

re-allocating at least a portion of said I/O resources from background processing activities to said delivery of said continuous media data;

modeling utilization of at least one I/O resources of said storage system based at least in part on said re-allocated I/O resources and based at least in part on admittance of said existing viewer returning from said cached state of said storage system to said I/O state of said storage system;

determining if a possible value or range of possible values of cycle time exist to balance said I/O capacity with said buffer memory space, wherein said I/O capacity is balanced with said buffer memory space based at least in part on said modeled I/O resource utilization based at least in part on said re-allocated I/O resources; and then

admitting said existing viewer returning from said cached state of said storage system to said I/O state of said storage system if a possible value or range of possible values of cycle time based at least in part on said re-allocated I/O resources exists to balance said I/O capacity with said buffer memory space; or

refusing to admit said existing viewer returning from said cached state of said storage system to said I/O state of said storage system if a possible value or range of possible values of cycle time based at least in part on said re-allocated I/O resources is determined not to exist to balance said I/O capacity with said buffer memory space;

63. The method of claim 62, wherein if a possible value or range of possible values of cycle time based at least in part on said re-allocated I/O resources exists to balance said I/O capacity with said buffer memory space, then performing one of the following steps prior to admitting

said existing viewer returning from said cached state of said storage system to said I/O state of said storage system:

leaving the existing value of cycle time and the existing value of read-ahead size unchanged if the existing value of cycle time is equal to said determined possible value of cycle time to balance said I/O capacity with said buffer memory space, or if the existing value of cycle time is within said determined range of possible values of cycle time to balance said I/O capacity with said buffer memory space; or

if the existing value of cycle time is not equal to said possible value of cycle time determined to balance said I/O capacity with said buffer memory space or is not within said range of possible values determined to balance said I/O capacity with said buffer memory space, then determining a new value of cycle time for said storage system that is equal to said determined possible value of cycle time to balance said I/O capacity with said buffer memory space, or that is within said determined range of possible values of cycle time to balance said I/O capacity with said buffer memory space; and determining a new value of read-ahead size for said storage system based at least in part on said new value of cycle time for said storage system.

64. A method of modeling utilization of one or more I/O resources in an information delivery environment, comprising monitoring at least one of said system I/O performance characteristics associated with said I/O resources, and modeling utilization of at least one of said I/O resources based at least in part on said monitored I/O system performance characteristics.

65. The method of claim 64, wherein said information delivery environment comprises delivery of continuous media data to a plurality of viewers from an information management system; and wherein said I/O resources comprise I/O capacity and buffer memory space of said information management system.